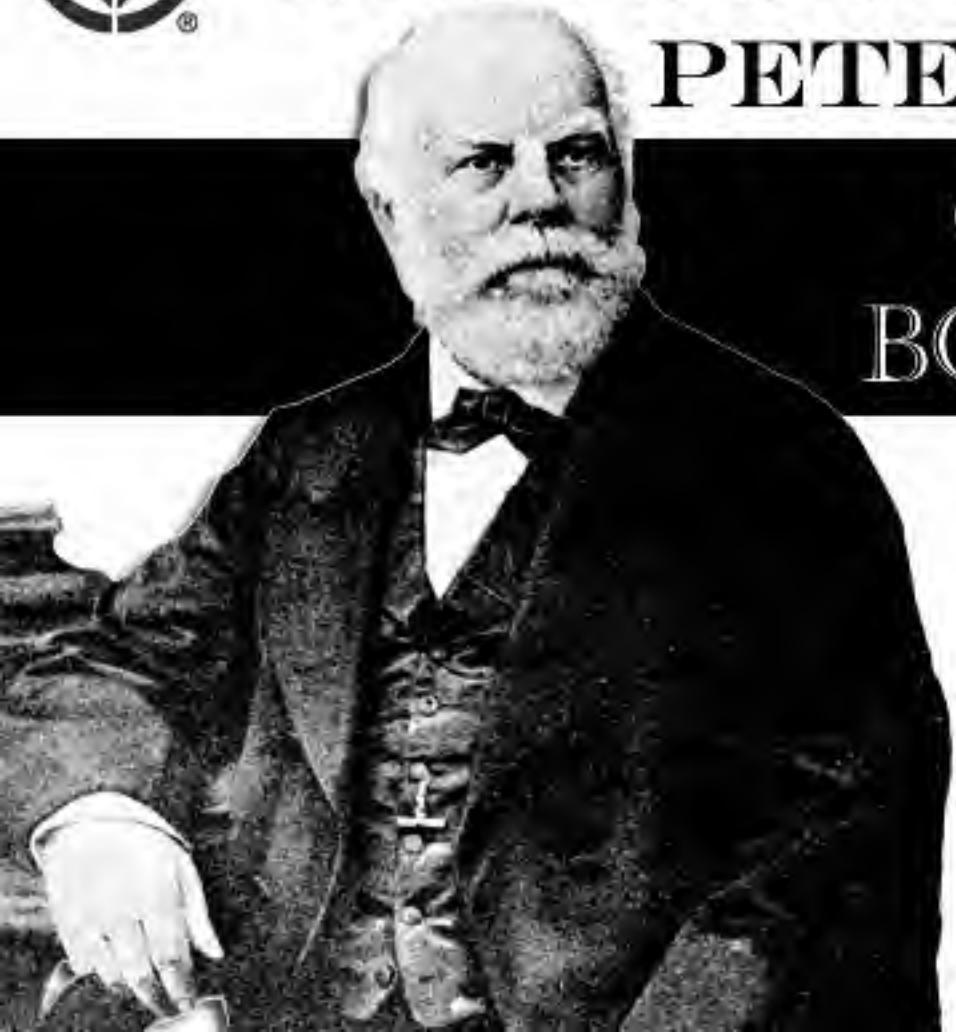




MISSOURI BOTANICAL GARDEN

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GEORGE ENGELMANN BOTANICAL NOTEBOOKS

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au crétinisme en Suisse, 270 pp. 8vo., Savy, F. B. on the Diseases of the Mind and Nervous System, against the so-called "materialists" or the "free

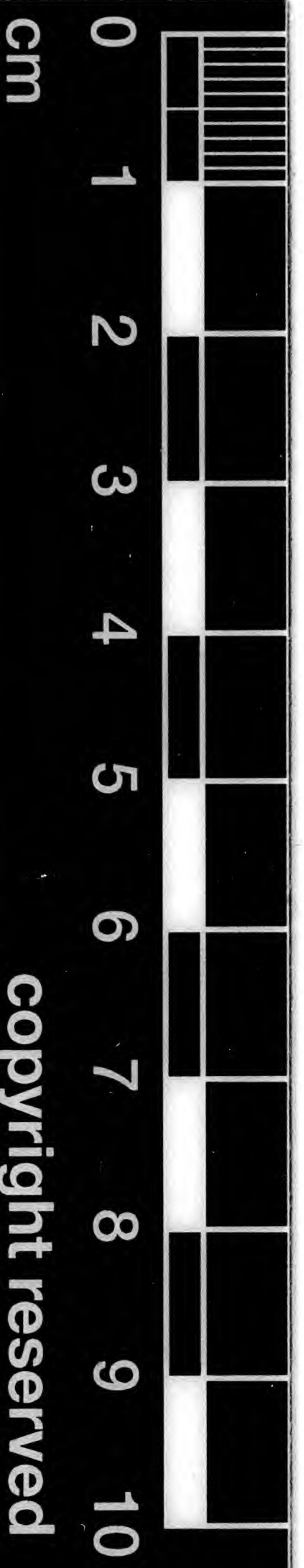
Pithos
C. tuberosa
P. radiata
P. tuberosa
P. radiata

V. Positive or Negative Electricity in the Observations of '61 & '62.

	Positive Electricity.		Negative Electricity.		No Electricity, or 0.		Highest Positive Electricity.	
	1861.	1862.	1861.	1862.	1861.	1862.	1861.	1862.
Jan.....	179	179	3	5	2	40°	40°	
Feb.....	162	166	6	2	34	33		
March...	168	179	15	8	30	48		
April....	157	157	12	22	33	52		
May.....	171	180	17	5	25	32		
June ...	162	143	5	2	20	16		
July.....	183	153	3	8	24	14		
August..	176	143	5	4	40	15		
Sept.....	169	117	1	1	10	61		
Oct.....	162	143	4	1	20	41		
Nov....	172	157	2	3	6	16		
Dec....	175	166	5	7	6	17		
	2046	1883	78	67	59	225	42°	52°

MISSOURI BOTANICAL GARDEN
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11664



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MISSOURI
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GARDEN



vvv

Aug 23 1865

Pennisetum *Curllianum*

Branches glaucous, leaves stout, in 3-⁴ crowded
units (or panicle) lanceolate, long attenuate,
5-6 lines long, reflexed, deciduous after the
first summer. (fringed on margin)
Sheath about 8 lines long full year, 2-4 lines -
In following seasons, when older
leaves stout 6-8 or even 9 lines long, finely
serulate at edges, slightly rough on midrib
and 6'-8 sides long, considerably flattened, black indistinctly
ribbed and dull (opaque) on the lower smooth and
shining on the upper from side, obliquely almost sharp,
rounded, broad above and pointed on lower end
sharp on the outer. I wonder on the inner overlapping
wing (with the said 15-16 lines long, broadest in upper third
(5-6 lines)



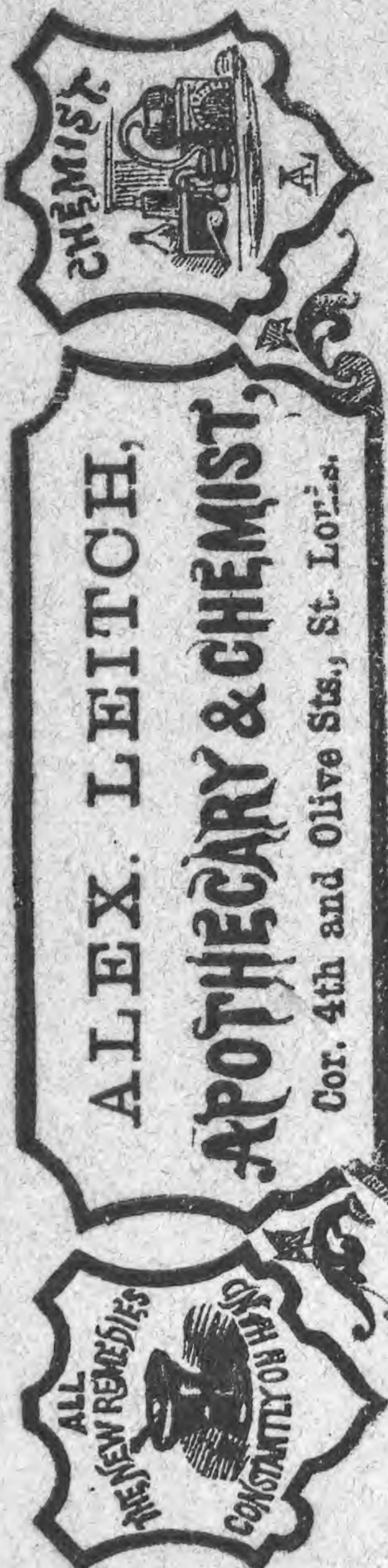
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over

Cone oval (*pendulans*?) 8" by 6" high
(open)
Stalks $\frac{21}{36}$ arranged, 8 & 13 rows must
proximate.

Bracts of stalks oval, or rectangular
emarginate, partially forming the base of
the seeds of the stalks next below.

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JOURNAL OF POLYMER SCIENCE

191

Oct 18
Pinus insignis Steyermark
incl'd: *P. tuberculata* Gr.
& *P. radiata* Gr. file No. 2000
209

16 Givin
8-10 miles, cut short
way forward on the
17 Oct 1

the Editor, A.A. Berlin, 1860, from the Institute of the German
Academy; Gelehrte Akad. des Wissenschaften
Mitglieder, 1860, — E. 1860, — Denkreden auf
1860, — Grenzen und
C. H. 1860, — 550
112191 2111230 259 265 351 550
S. F. —

1861.	1862.	1861.	1862.	2	40°	40°
Positive Electricity.	Negative Electricity.	Positive Electricity.	No Electricity, or 0.	1861.	1862.	Highest Positive Electricity.



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Dr. Koch presented specimens of quartz and of the silicious conglomerate from Madison County mentioned in Dr. Hiltgard's letter.

Dr. Engelmann stated that the mean temperature of July (77.5°) had been lower than the usual mean of that month, and that the fall of rain during the same month (2.04 inches) was about one-half less than usual.

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The President, Dr. ENGELMANN, in the chair.

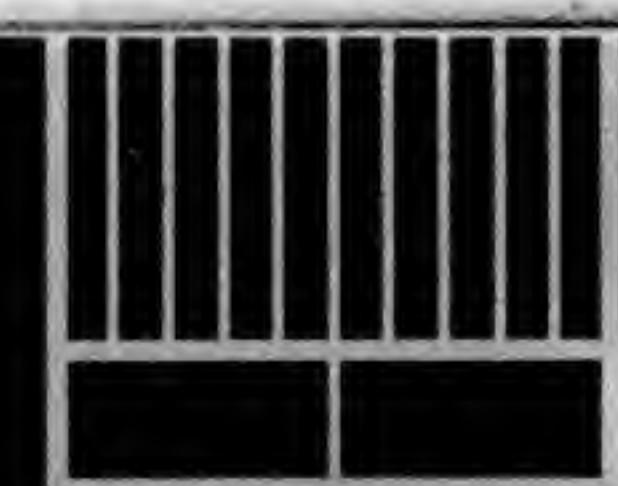
Six members present.

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and Practice of Medicine, by Dr. ANDREW, Physician to St. Bartholomew's, 1 vol., small 8vo.

Prof. ELLIOT, of New York, is writing a work on the Hygiene of Infancy and the Diseases of Children, soon to be issued by Appleton & Co., N. Y.—Dr. EUSTACE SMITH's book on the Wasting Diseases of Children, is being reproduced by Mr. Lea in the *Medical News and Library*. Hudson's Lectures on the Study of Fever has been reviewed at some length in the present number of the Journal.

In psychological medicine we observe: DESPINE, *Psychologie naturelle*, a study on the intellectual and moral faculties, normally and in their manifestations in the insane and in criminals, 3 vols., 8vo., Montpellier;—LUXIER, *Etudes sur les maladies mentales et les asiles d'aliénés. De l'aliénation mentale et du crétinisme en Suisse*, 270 pp. 8vo., Savy, Paris. Also the announcement, by Messrs. D. Appleton & Co., N. Y., of a work by Prof. HAMMOND on the Diseases of the Mind and Nervous System. A second *thèse* by Dr. GRENIER (whose first dissertation on free will called forth the storm against the so-called "materialists" of the Paris medical schools), entitled "On the Senile Softening of the Brain," is dedicated to Monseigneur Dupanloup, Bishop of Orléans. Dr. DURANNE, "Aneurisms of the Brain, considered as a haemorrhage," 129 pp.

In Paris appeared
GREENHOW, On Ch
introduced i

186

Editorial.

Editorial.

185

MEDICAL BIBLIOGRAPHY.

The experiment of introducing the institution of "Hospital Reports", in this country, which was begun last year by the PENNSYLVANIA HOSPITAL in Philadelphia, has met with success, the second volume of its Reports having just been published. The Reports of the BELLEVUE and CHARITY HOSPITALS of New York, though announced over a year ago, have not yet made their appearance; but the first volume is now promised to be out on Feb. 15th. (We have not heard from it.)

Prof. CARSON has written a History of the Medical Department of the University of Pennsylvania.

Prof. HARTSHORNE, of the same school, has condensed "the indispensable elements of a course of medical study" into a *Conspectus of the Medical Sciences*, 1002 pp., large royal 12mo.; in the interest of the author we hope that the conspectus may escape the odium attaching to the "compend" of Neill and Smith, of which it will be the successor.

Anatomy and Physiology.—We note the advertisement of a large illustrated work on the anatomy (?) of the nervous system: ROUDANOWSKI, *Etudes photographiques sur le système nerveux*, 8vo., atlas and photographs in folio, published by Adr. Delahaye at 250 francs. A monograph by Prof. L. J. ... on the anatomy of the pharynx—*Recherches nippf des* of a special

anatomie



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Pinus insignis?

March 9 1865

California State Survey

from half open cone, no noo

×10



2 embryos with 7 cotyl
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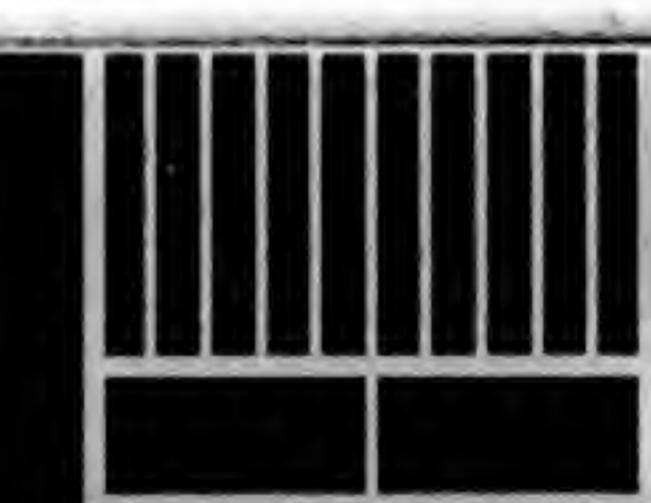


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11668
LEITCH & CORRIES,
DRUGGISTS,

South-West Corner of Fifth and Market Streets.

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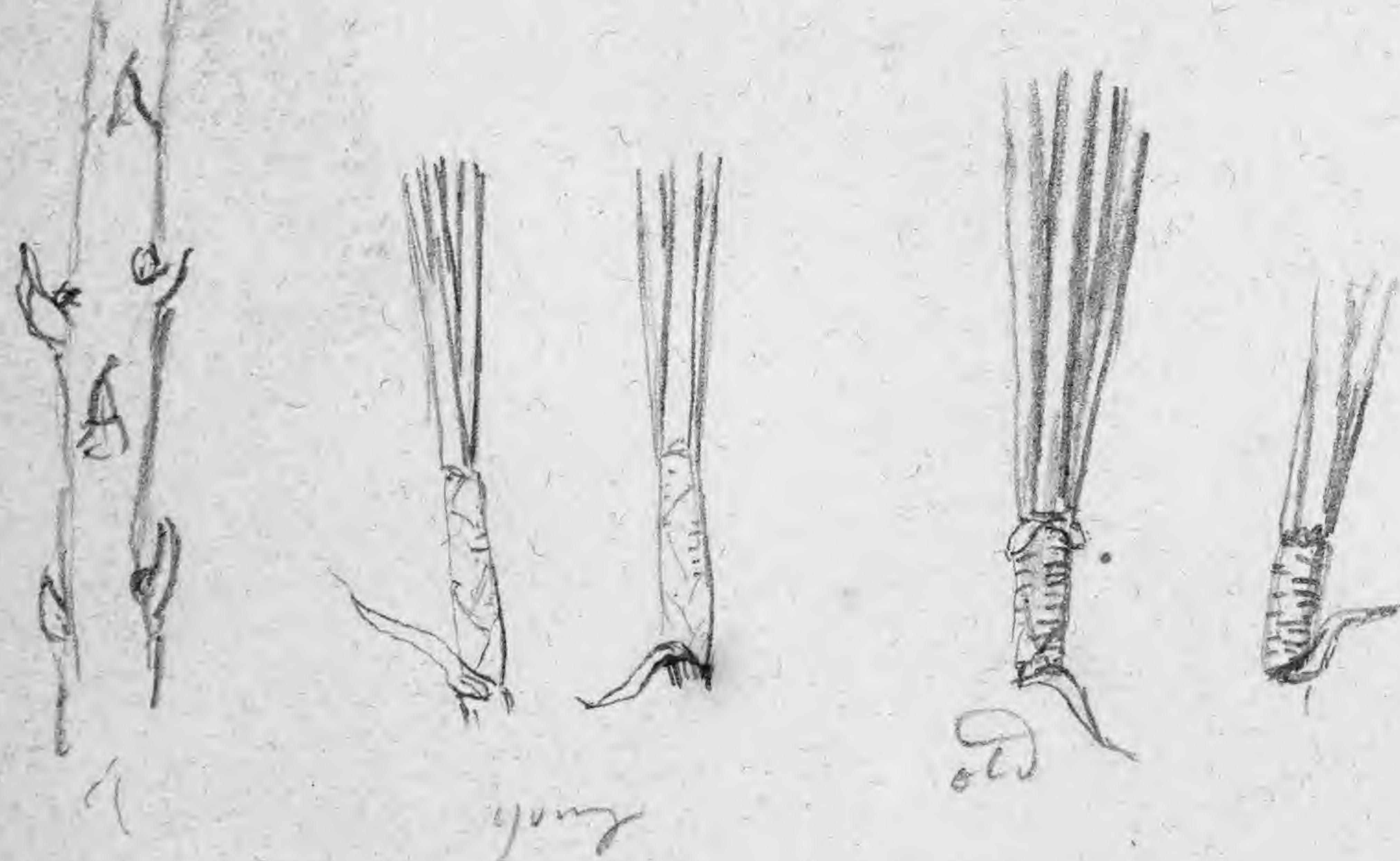
Pinus insignis

May 1862

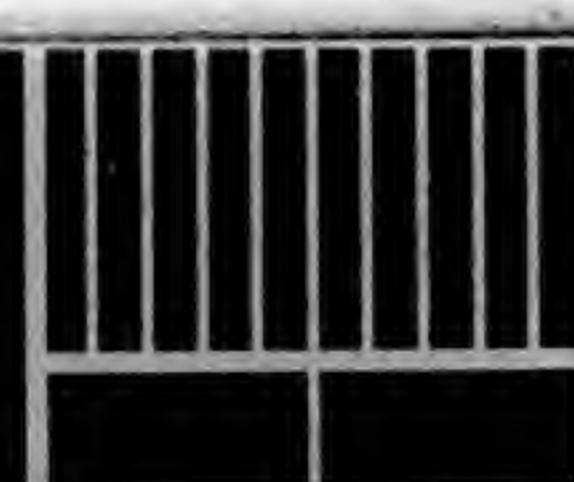
Monterey, Calif. May 1852

branch after
falling of leaves

$\times 2$



bracts linear at lower, spreading
or reflexed, persistent nearly as
long as leaves; this being even
longer.



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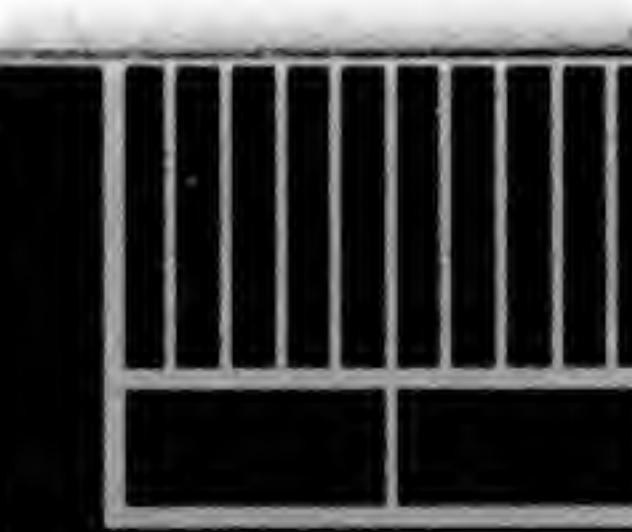
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ARTHUR LEITCH,
APOTHECARY AND CHEMIST,

Sixth and Market streets, St. Louis, Mo.

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Pinus tuberculata

~~Herbarium~~

reins zur Beförderung des Gartenbaues, 1860, Nos. 1-52—1861, Nos. 1-6, Berlin, *from the Society*; Atti della Societa Ital. di Scienze Nat., Milano, Vol. II., Fasc. 2, 1860, *from the Society*; Atti dell I. R. Istituto Veneto, T. V., Ser. iii., Disp. 10—T. VI., Ser. iii., Disp. 1-3, 1860-1, *from the Society*; Visir-und Recheninstrumente von Ernst Sedlaczeb, Wien, 1856,—Rechenschieber, von E. Sedlaczeb, Wien, 1856,—Kompendium der ebenen und sfärischen Trigonometrie von E. Sedlaczeb, Wien, 1856, *from Mr. Senoner*; L'Ortolano, Giornale Popolare d'Orticoltura, Trieste, Anno I. 1-12, III. 1-9, 1859-60,—Allocuzione da Prof. Adolfo Stopice, Trieste, 1860, *from the Society*; Fr. Ambrosii Flora Tiroliae Australis, Vol. II., Pt. 4, *from the Author*; Verhandl. des Naturh. Vereins, Bonn, Jahrg. XVII., 1-2, 1860, *from the Society*; Sitzungsbs. der K. K. Akad. der Wissenschaften, Wien, Band XLII., No. 22-28, 1860, *from the Society*; Nachrichten von der Georg-Augusts-Univ. u. der K. Gesellsch. der Wissenschaft., Göttingen, 1860, No. 1-29, *from the Society*; Bull. de la Société Linnéenne de Normandie, Vol. V., 1859-60, Caen, 1861, *from the Society*; Mém. de l'Acad. Imperiale de Metz, Ann. XLII., 1859-60, *from the Academy*; Jahrbücher des Vereins für Naturk. in Nassau, XIV. Heft, Wiesbaden, 1859, *from the Society*; Dr. J. C. Ed. Hoser's Rückblicke, Prag, 1848, von Dr. Weitenweber,—Sitzungsbs. der K. böhm. Gesellsch. der Wissenschaften, Prag, 1859, Juli-Dec.—1860, Jan.—Juni, *from the Society*; I. Bericht des Offenbacher Vereins für Naturk., 1860, *from the Society*; Würzburger Medicin. Zeitschrift, II. Band, 1-2 Hef., 1861, *from the Society*; Der Zoologische Garten, von Dr. D. F. Weinland, Jahrg. II., No. 1-6, 1860-61, *from the Editor*; XX. Bericht über das Museum Francisco-Carolinum, Linz, 1860, *from the Institution*; Monatsb. der K. Preuss. Akad. der Wissenschaften, 1860, Berlin,—General Register, 1836-58, Berlin 1860, *from the Academy*; Gelehrte Anzeigen, Vol. 49 & 50,—Sitzungsbs. des K. bayer. Akad. des Wissenschaften, 1860, Heft 1-3, München,—Verzeichniss der Mitglieder, 1860,—Bedeutung der Sanskritstudien, von Dr. Wilb. Christ, 1860,—Denkrede auf Alex. von Humboldt, von C. F. P. von Martius, 1860,—Grenzgebiete der malischen Forschung, von Dr. D. Acad. Nat. Sciences, Rep. of the Trustees, 1860,

Fig. 6-8 vol. 6-8 vol. extra long
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162

TRANS. OF THE ACAD. OF SCIENCE.

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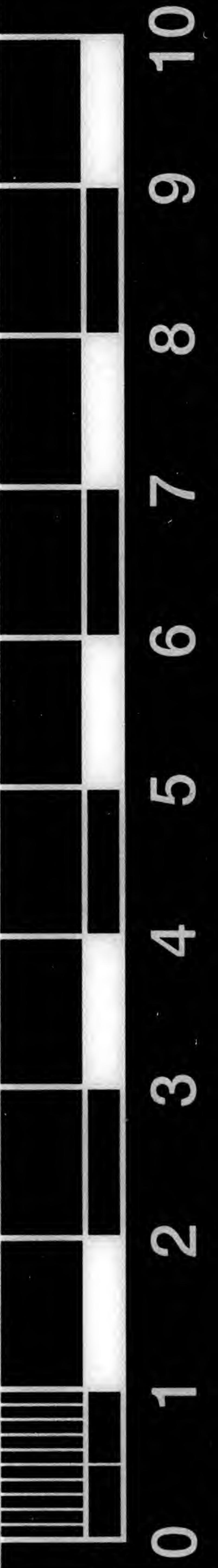
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blows to
leaves

6-8 in off
soil

at a low
rate

IV. *Direction of Winds and number of Thunderstorms in '61 & '62.*

1861.	E.	N.	N.E.	S.W.	N.W.	S.	W.	S.E.	Prevailing Winds.	Thunder- storms.
January.....	11	3	12	22	38	18	28	61	S.E.	0
February	4	2	2	35	24	19	41	60	S.E.	2
March.....	12	11	10	23	30	19	42	40	W. & S.E.	3
April	16	10	9	26	21	35	34	26	S. & W.	2
May	26	10	23	21	8	13	49	35	W. & S.E.	5
June	12	21	22	20	25	26	8	41	S.E.	7
July	3	31	14	21	26	46	15	29	S.	3
August	18	24	58	17	11	18	3	37	N.E.	5
September...	6	14	18	26	30	13	21	52	S.E. & N.W.	3
October.....	12	9	5	21	30	33	30	46	S.E. & S.	1
November...	7	15	8	22	27	20	36	44	S.E. & W.	1
December ...	9	19	9	25	23	33	17	51	S.E. & S.	0
	136	169	190	279	293	293	324	522	S.E.	32

1862.	E.	S.W.	N.	N.E.	W.	S.	N.W.	S.E.	Prevailing Wi	Th.
Jan.....	19	6	19	23	29	3	38	51	S.E.	
Feb.....	14	9	18	16	22	7	39	43	S.E. & N.W.	
March ...	9	14	3	15	59	10	34	43	W., S.E. & N.	
April ...	12	13	18	31	18	11	34	47	S.E., N.W. &	
May ...	12	18	14	38	18	30	14	44	S.E. & N.E.	
June ...	3	29	24	16	8	36	26	23	S., S.W., N. & S.E.	
July.....	5	25	17	7	2	24	31	77	S.E.	
Aug.....	6	16	16	45	28	28				

5th

Piney Woods
submolt.

Sumptine Bolander No 1.

WISLIZENUS—ATMOSPHERIC ELECTRICITY. 115

Additional Remarks on ATMOSPHERIC ELECTRICITY.

By A. WISLIZENUS, M.D.

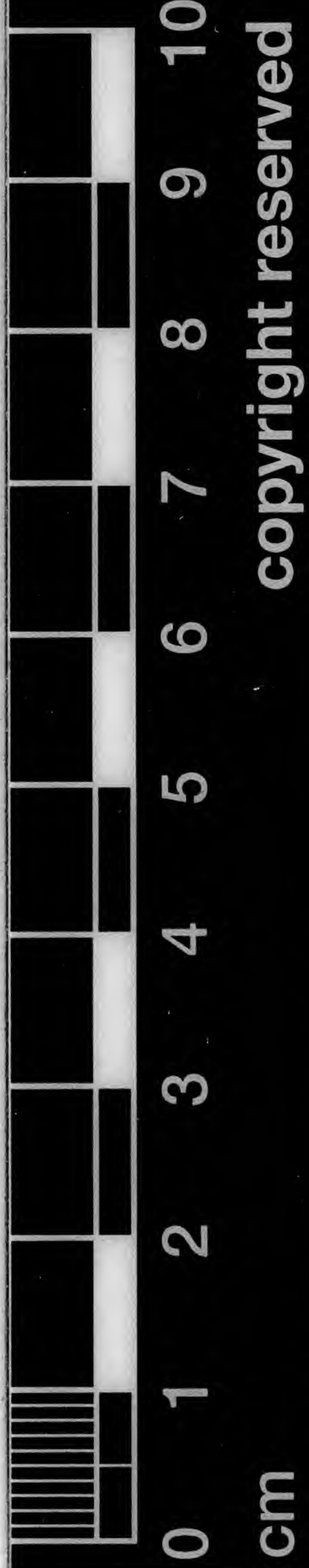
The delay in the publication of this volume enables me to add to my observations of atmospheric electricity in 1861, the result of my observations in 1862. The latter observations have been made in the same manner and by means of the same fine glass thread, which, after many thousand torsions, proves as good as ever. I present herewith in tabular form the general result of my observations in 1861 and 1862.

I. Monthly mean of Positive Atmospheric Electricity in 1861 and 1862, at St. Louis, Mo., based upon daily observations at 6, 9, 12, 3, 6 and 9 o'clock, from morning till night.

	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1861*	16.5	12.1	9.8	8.8	7.8	4.0	3.7	3.4	3.0	7.1	10.0	14.3	8.4
1862...	12.1	16.0	9.4	10.6	7.5	3.0	2.2	2.3	3.0	7.7	12.6	13.9	8.4

* This table of 1861 differs in some decimals from that published on page 66 and in Diagram No. 1. Having discovered some errors, I calculated all my observations once more, and give now the present as the corrected table.

II. Monthly mean of Temperature and of Relative Humidity in 1861 and 1862 at St. Louis, Mo., based upon daily observations of Atmospheric Electricity.



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40. Miss



Pinus tenuifolia May 22 1862
Scales or bracts of
young turions entirely
brown to tip, ovate -
lanceolate acute or
apiculate, short
scales or
bracts with
fertile leaves
fringed on margin
in axil. frings white or
usually also brown
pulvilli large
lower bracts often without
any leaves in axils
bracts of sterile
or bracts ovate, obtuse



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16 tte

Pinus Taeda

576-80

JOURNAL OF PROCEEDINGS.

161

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Pinus Taeda

	leaves length	sheath young old	length of axis of muc. infl.	length of anthers	number invol. scales	size of pollen
Delaware	6 $\frac{1}{2}$ -7 $\frac{1}{2}$	9"-12"	6"	$\frac{1}{2}$ "	2"	8 0.036-38
Houston	8"		4-4 $\frac{1}{2}$	$\frac{1}{2}$ "	2"	10-12 34-37
North Carol.	7"		5"			
Camden Ark.	8 $\frac{1}{2}$ "	9"-10"	5"			
? Mobile	7"		5"	$\frac{1}{2}$ "	1"	12-13 39-40



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JONES & FIFTH DRUGISTS
COR. FIFTH & MARKET STREETS,
ST. LOUIS, MO.

McKinnick & Co. Man & Wine.

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Pinus Taeda

March 21 1871

Bluffton S. C., Dr. Mullikin comp. March 12 1871

"young, tall"

full supply of Pollen

March 26th examined

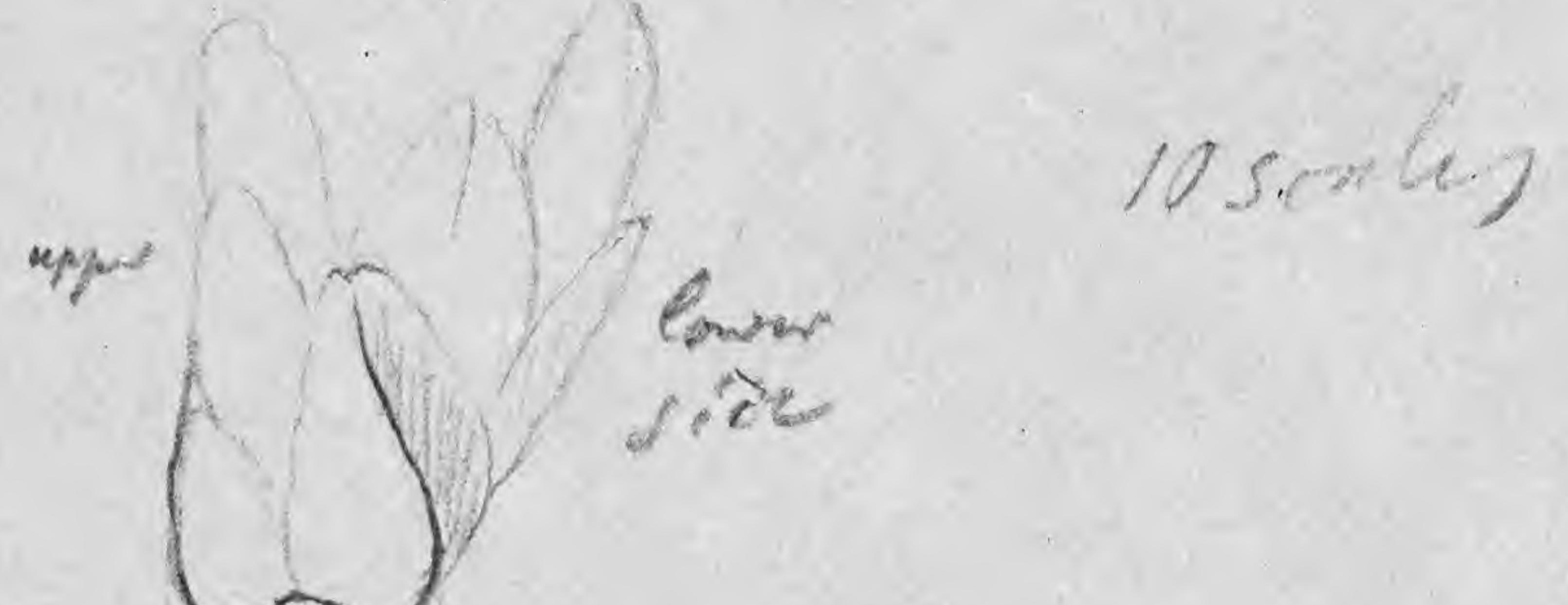
$\frac{30-36}{415}$, mean $\frac{33}{415}$ mm

$\frac{30-36}{415}$, mainly $\frac{33-34\frac{1}{2}}{415}$

$\frac{31-32}{415}$ mm

same — March 14 1871

few pollen grains adhering



10 scales

3
 $\times 4$
outer lateral scales
fully half as long as
involucrum, or longer



0 1 2 3 4 5 6 7 8 9 10

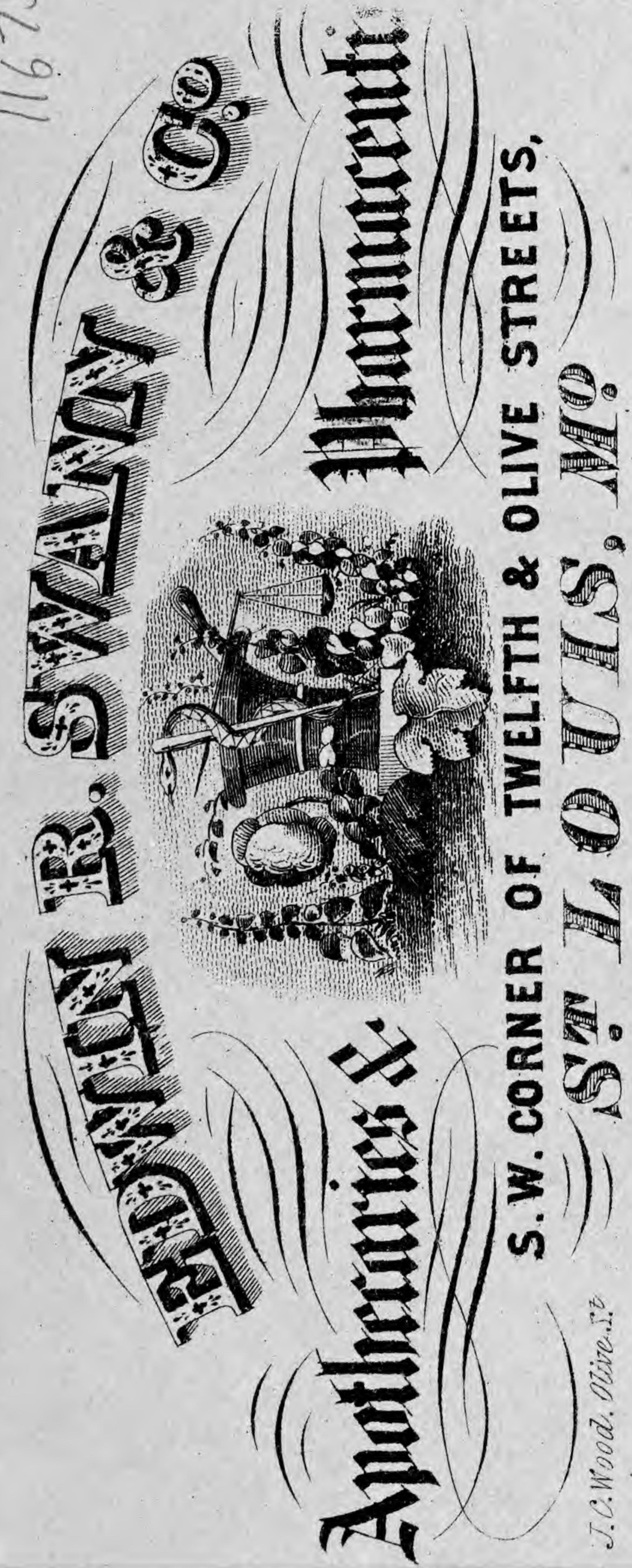
cm

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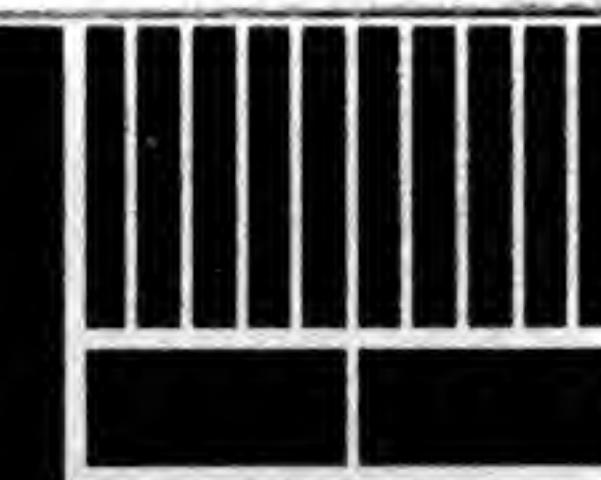
MISSOURI
BOTANICAL
GARDEN

11675



S. W. CORNER OF TWELFTH & OLIVE STREETS,
ST. LOU^{IS}, M^o.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0

1

2

3

4

5

6

7

8

9

10

cm

copyright reserved



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BOTANICAL
GARDEN

P. Judd

May 21 1871

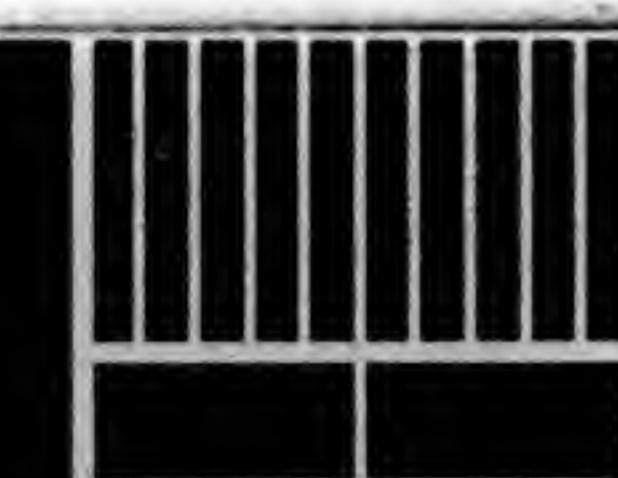
Aiken SC

Received 1870

x4

x30

leaves 6-7" long



0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN

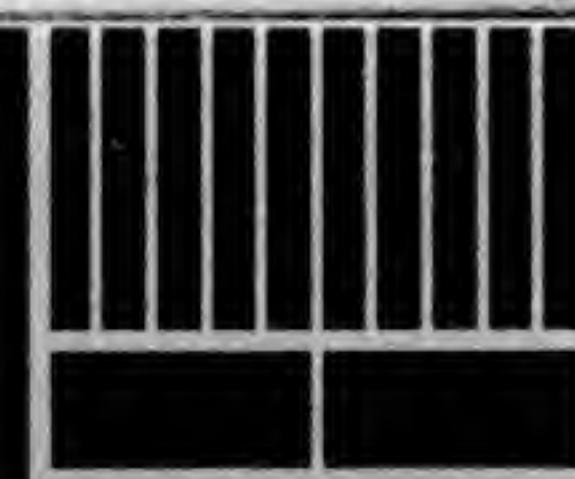
11676

Leitch & Corlies

(DRUGGISTS)

West Fifth and Market
South West Corner Streets

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0

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cm

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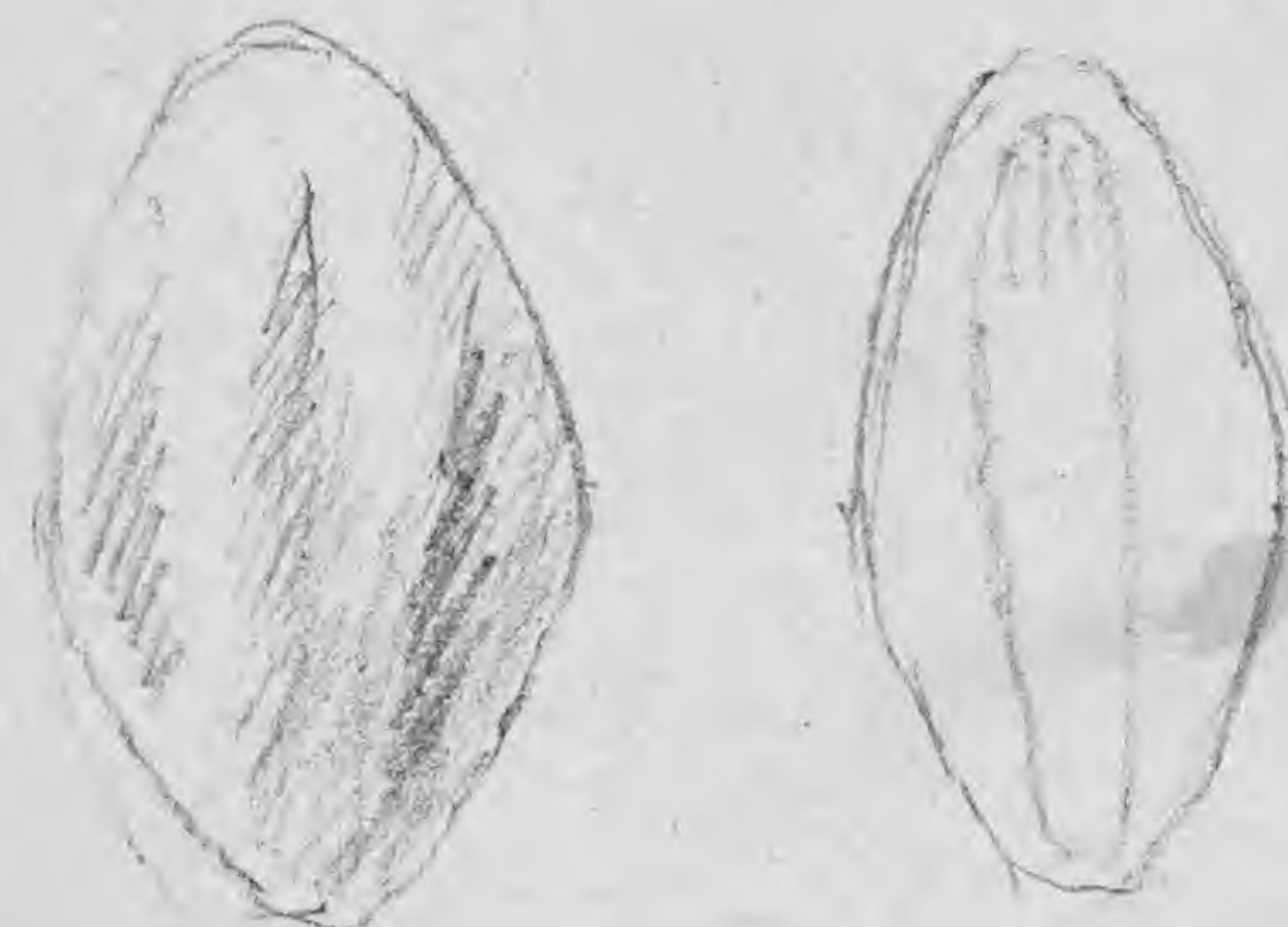


MISSOURI
BOTANICAL
GARDEN

Prae-
Flora

May 30 1878

x4



3 ridges on
outer side
of Black seed

cotyl
6-7



0 1 2 3 4 5 6 7 8 9 10

cm

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BOTANICAL
GARDEN

11677

Engelmann, M. D. 

APOTHECARY,

No. 2600 Faedde Ave., S. W. Cor. Jefferson Ave.,
St. Louis, Mo.

No. Date, 187

Ge

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

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10

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GARDEN

Geo. Engelmann, M. D.,

No. 3003 Locust Street,

J. Taek

March 9 1880

fresh Pollen, March 1-1880 S. Cen

Flowers not fully developed

X415

1 mm

$$\frac{29.5 - 32.5 \text{ mm}}{415} = 0.071 - 0.078 \text{ mm}$$

$$\frac{14 - 15.5}{415} = 0.034 - 0.037 \text{ lines}$$



0 1 2 3 4 5 6 7 8 9 10

cm

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1167.8

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0 1 2 3 4 5 6 7 8 9 10

cm

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